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(54) **PRODUCTION OF HIGH STRENGTH STEEL
PIPE EXCELLENT IN SULFIDE STRESS
CORROSION CRACKING RESISTANCE**

(57) Abstract:

PURPOSE: To produce a high strength steel pipe excellent in sulfide stress corrosion cracking resistance by forming a steel pipe in such a manner that the componental compsn. and seamless rolling temp. are specified, completing its bainitic transformation and executing hardening and tempering at specified temps.

CONSTITUTION: A billet contg., by weight; 0.15 to 0.4%, C, 0.1 to 1% Si, 0.3 to 1% Mn, 0.1 to 1.5% Cr, 0.1 to 1% Mo, $\leq 0.015\%$ P, $\leq 0.005\%$ S, 0.0005

to 0.003% B, 0.01 to 0.1% Al and 0.003 to 0.01% N and contg. one or \geq two kinds among 0.01 to 0.05% Nb, 0.01 to 0.5% V and 0.01 to 0.03% Ti, and the balance Fe with inevitable impurities is subjected to seamless rolling so as to regulate the final finish temp. into the recrystallization temp. $\pm 50^\circ\text{C}$ and is worked into a steel pipe. This steel pipe is subjected to accelerated cooling to complete its bainitic transformation, is heated in the temp. range of the Ac_3 transformation point (790 to 830°C) to the Ac_3 transformation point + $< 100^\circ\text{C}$, is hardened from the same temp. and is thereafter tempered at the Ac_1 transformation point or below.

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